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09/587,904	06/06/2000	Junji Sato	MAE232	9961
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RABIN & Berdo, PC 1101 14TH STREET, NW SUITE 500 WASHINGTON, DC 20005			GIBBS, HEATHER D	
			ART UNIT	PAPER NUMBER
			2622	

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/587,904

Applicant(s)

SATO, JUNJI1

Examiner

Heather D Gibbs

Art Unit

2622

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 29 September 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.


The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: 5-9 and 14-19.Claim(s) rejected: 1-4, 10-13 and 20-26.

Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☒ Other: See Continuation Sheet


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BIOLOGY CENTER 2600

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 2, 10, 19, 20, 22 and 23 in accordance with the following list of claims.

1. (Currently Amended) A facsimile machine, comprising:
a detection unit detecting transition points in a width direction in image data representing an image of a page having a width greater than a printing width of the facsimile machine, the image data including blank areas at right and left edges of the image of the page in the width direction; and
an adjustment unit coupled to the detection unit, having means for deciding whether the image data will be adjusted on the basis of the detected transition points.
2. (Currently Amended) The facsimile machine of claim 1, wherein the image data are coded data that have not yet been expanded into bit-mapped image data, and the detection unit detects ~~margins~~ the blank areas at the right and left edges of the page image on the basis of the transition points of the coded data.
3. (Previously Presented) The facsimile machine of claim 1, wherein the adjustment unit has means for adjusting the image data by adjusting a printing position of the image data in a horizontal scanning direction corresponding to the width direction.
4. (Previously Presented) The facsimile machine of claim 1, wherein the adjustment unit has means for adjusting the image data by zooming the image data.
5. (Previously Presented) The facsimile machine of claim 4, the adjustment unit zooms the image data by adding an offset to horizontal coordinates of said transition points, then multiplying by a zoom ratio, the horizontal coordinates being measured in the width direction.
6. (Previously Presented) The facsimile machine of claim 5, wherein the image data is comprised of horizontal scanning lines and the adjustment unit changes said offset

once per horizontal scanning line.

7. (Original) The facsimile machine of claim 5, wherein the adjustment unit assigns a random value to said offset.

8. (Original) The facsimile machine of claim 5, wherein the adjustment unit assigns a fixed value to said offset in areas with comparatively few said transition points, and assigns a random value to said offset in areas with comparatively many said transition points.

9. (Original) The facsimile machine of claim 8, wherein the adjustment unit distinguishes between said areas with comparatively few said transition points and said areas with comparatively many said transition points within each said horizontal scanning line.

10. (Currently Amended) A method of processing image data, representing an image of a page, in preparation for printing of the image data by a facsimile machine having set printing margins and a printing width less than a width of the page image, the image data including blank areas at right and left edges of the image of the page in a width direction of the page image, the method comprising the steps of:

(a) detecting ~~margins~~ the blank areas in the width direction in the image of said page from the image data;

(b) comparing the detected ~~margins~~ blank areas with the printing margins in the width direction of the facsimile machine; and

(c) modifying the image data according to differences between the detected ~~margins~~ blank areas and the printing margins.

11. (Original) The method of claim 10, wherein said image data comprise run-length data.

12. (Original) The method of claim 10, wherein said step (c) comprises repositioning

the image of said page.

13. (Original) The method of claim 10, wherein said step (c) comprises zooming the image of said page.

14. (Previously Presented) The method of claim 13, wherein said step (c) further comprises the steps of:

- (d) determining horizontal coordinates, measured in the width direction, of transitions between different picture-element values in the image of said page;
- (e) modifying said horizontal coordinates by adding an offset; and
- (f) multiplying the modified horizontal coordinates by a zoom ratio.

15. (Original) The method of claim 14, said step (c) further comprises the step of:
(g) changing said offset once per horizontal line of picture elements in the image of said page.

16. (Original) The method of claim 14, wherein said step (c) further comprises the steps of:

- (h) distinguishing between first areas, in which said transitions occur comparatively frequently, and second areas, in which said transitions occur comparatively infrequently, in the image of said page;
- (i) assigning a randomly varying value to said offset in said first areas; and
- (j) assigning a fixed value to said offset in said second areas.

17. (Original) The method of claim 16, wherein said step (h) includes counting said transitions in each horizontal line of picture elements in the image of said page, said offset having a single value in each said horizontal line.

18. (Original) The method of claim 16, wherein said step (h) includes comparing distances between said transitions with a predetermined threshold, thereby enabling said offset to vary within each horizontal line of picture elements in the image of said page.

19. (Original) The method of claim 10, wherein the detected margins include a left detected margin and a right detected margin, the printing margins include a left printing margin and a right printing margin, and step (c) further includes the steps of:

(k) reducing the image of said page in width, by zooming the image horizontally, if the left printing margin exceeds the left detected margin and the right printing margin exceeds the right detected margin;

(l) shifting the image of said page rightward if the left printing margin exceeds the left detected margin and the right printing margin does not exceed the right detected margin; and

(m) shifting the image of said page leftward if the right printing margin exceeds the right detected margin and the left printing margin does not exceed the left detected margin.

20. (Currently Amended) The facsimile machine of claim 1, wherein:

the detection unit detects ~~margins~~ the blank areas at the right and left edges of the image of the page in the width direction of the page image on the basis of the transition points in the width direction of the image data; and

the adjustment unit compares the detected ~~margins~~ blank areas of the page image with set printing margins, and makes a decision that the page image will not be reduced in width for printing if the set printing margins are smaller than the detected ~~margins~~ blank areas of the page image.

21. (Previously Presented) The method of claim 10, wherein the printing margins are set with reference to the width of the detected page image.

22. (Currently Amended) A method of processing image data, representing an image of a page, in preparation for printing of the image data by a facsimile machine having set printing margins and a printing width less than a width of the page image, the image data including blank areas at right and left edges of the image of the page in a width direction of the page image, the method comprising the steps of:

(n) detecting ~~margins~~ the blank areas in the width direction in the image of said page from the image data;

(o) comparing the detected ~~margins~~ blank areas with the printing margins in the width direction of the facsimile machine; and

(p) making a decision whether the image data will be adjusted on the basis of the difference between the detected ~~margins~~ blank areas of the page image and the set printing margins.

23. (Previously Presented) The method of claim 22, wherein step (p) comprises making a decision that the page image will not be reduced in width for printing if the set printing margins are smaller than the detected ~~margins~~ blank areas of the page image.

24. (Previously Presented) The method of claim 22, wherein the printing margins are set with reference to the width of the detected page image.

25. (Previously Presented) The facsimile machine of claim 1, wherein the image data is comprised of scanning lines and the detection unit detects leftmost and rightmost transition points in the width direction in the image data by detecting first and last transition points for each of the scanning lines.

26. (Previously Presented) The facsimile machine of claim 20, wherein the image data is comprised of scanning lines and the detection unit detects leftmost and rightmost transition points in the width direction in the image data by detecting first and last transition points for each of the scanning lines.

REMARKS

The Final Office Action dated July 1, 2004 has been received and its contents carefully considered.

Claims 1-26 are pending in this application. Claims 1, 2, 10, 19, 20, 22 and 23 are amended herein. As amended, claims 1, 10 and 22 remain the independent claims.

The applicant acknowledges with appreciation the Examiner's indication in the Action that claims 5-9 and 14-19 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1, 2, 10, 19, 20, 22 and 23 are amended herein to avoid use of the word "margin" with regard to the page image because it might be misconstrued as denoting the area at the edge of a document that is not scanned. The use of the word "blank" to refer to left and right margin areas of the image of the page appears, for example, in line 8 on page 1 of the specification. It is respectfully submitted that the changes made do not affect the scope or meaning of the claims.

In the Final Office Action, claims 1, 10 and 22 are rejected under 35 U.S.C. §102(e) as being anticipated by Kazuo (Japanese Patent Publ. No. 403037282A). The rejection is respectfully traversed.

The Examiner apparently relies on the English-language abstract of Kazuo reference. According to the Examiner, Kazuo teaches a facsimile machine, but in fact Kazuo teaches a serial printer. The title of the invention is "printer" and the word "facsimile" does not appear anywhere in the application. This difference is significant because whereas a facsimile machine receives page image data, a serial printer like the one disclosed in Kazuo simply receive a series of character codes from a host computer and prints the characters, one after the other, on successive lines as the carriage travels back and forth between the right and left margins.

Patentable weight not given to preamble as the body of the written claims is taught in the constitution of Kazuo

According to the Examiner, the facsimile machine taught by Kazuo comprises a detection unit detecting transition points in a width direction in image data. In fact, Kazuo teaches a paper width detector (3) that uses photosensors, for example, to detect the physical width of the paper, as noted in the lower left block of Japanese text on page 2.

The embodiment described by Kazuo is a wire dot matrix printer that receives character data from a host computer, expands the characters into dot matrix patterns as shown in Figs. 2 and 3, for example, and prints the dot patterns. In a conventional printer of this type, if a line of characters overruns the printing margins, it is carried over to the next line. As a result, the number of printed lines increases, from the number of lines shown in Fig. 4(a) to the number shown in Fig. 4 (b), for example. Kazuo's teaching is to delete the overrunning text as shown in Fig. 3 (d), so that the number of printed lines does not change. More specifically, in Fig. 3 (c), the dot data to the left of position I and to the right of position II, describing the letters "A" and "H", are deleted from the image buffer in the printer's RAM (4) so that the remaining dot data from I to II match the width of the page as detected by the paper width detector (3). That is, if the carriage carrying the wire dot printing head travels from left to right, it receives data read in order from address I to address II; if the carriage travels from right to left, it receives data read in the reverse order from address II to address I.

② When the width of paper 300 is equal to or larger than a scheduled printing width 8, data is transmitted to a dead driving control part according to the content of an image buffer 301.

Contrary to the Examiner's position, Kazuo does not teach any type of detector that examines the printing data received from the host computer, or the dot data stored in the image buffer, to detect transitions or find blank areas, and does not teach any adjustment of the image data made on the basis of the detected transitions, as the independent claims require. The printer described by Kazuo is therefore unable to decide how much blank area is included at the left and right edges of the page image and to make adjustments that take advantage of these blank areas.

① K'when said paper width 1 is smaller than the printing width 8, the left & right of the image buffer being actual printing data are respectively eliminated according to the detection result of a paper width detector."

For at least the foregoing reasons, it is respectfully submitted that amended claims 1, 10 and 22 patentably distinguish over the applied prior art reference.

Claims 2-4, 11-12, 20-21 and 23-25 stand rejected under 35 U.S.C. §103(a) as being obvious over Kazuo in view of Ogura (U.S. Patent No. 4,876,609). The rejection is respectfully traversed.

It is respectfully submitted that claims 2-4, 11-12, 20-21 and 23-25 are allowable for at least the reason that they depend from independent claims 1, 10 and 22. Further, it is submitted that the dependent claims recite features that independently distinguish over the applied art combination. With regard to claim 2, for example, the Examiner acknowledges that Kazuo fails to disclose "wherein the image data are coded

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data that have not yet been expanded into bit-mapped image data, and the detection unit detects margins of the page image on the basis of the transition points of the coded data."

To overcome this deficiency in the base reference, the Examiner points to Ogura as disclosing this limitation at column 7, lines 20-48, and argues that at the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize Ogura's invention in that of Kazuo. However, the text referenced by the Examiner in columns 7 of Ogura is a discussion of data compression and expansion in facsimile transmission and does not appear at all germane to the claims at issue. There appears to be nothing in Ogura that would suggest the combination proposed by the Examiner.

Ogura is relevant because in combination with Applicant's invention both deal with a facsimile that detects/adjusts margins/image data

The applicant believes that the amendments herein to the claims do not raise any issues requiring further search or other significant effort on the part of the Examiner, and are therefore appropriate for entry under 37 CFR 1.116. The applicant submits that claims 1-26, as amended, patentably distinguish over the applied art references, whether considered individually or in combination. Reconsideration and withdrawal of the final rejection, and allowance of the application, are respectfully requested.

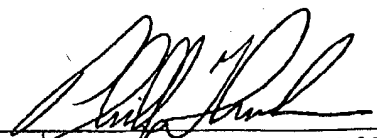
Should the Examiner feel that a conference would help to expedite the prosecution of this application, the Examiner is hereby invited to contact the undersigned counsel to arrange for such an interview.

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Respectfully submitted,


September 29, 2004

Date


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Continuation of 10. Other: Applicant argues the Kazuo reference is not relevant to the claimed invention in that Kazuo teaches of a printer and not specifically a facsimile. The examiner did not ^{give} ~~issue~~ patentable weight on the preamble as the body of the written claims is taught in the constitution of Kazuo. Facsimile devices and printers are similar in that both are image processing devices. Applicant also makes a position, "Kazuo does not teach... any adjustment of the image data made on the basis of the detected transitions." Upon further consideration, the Examiner finds this limitation taught in the Constitution when Kazuo states "When said paper width 1 is smaller than the printing width 8, the left and right of the image buffer being actual printing data are respectively eliminated according to the detection result of a paper width detector." Applicant continues to argue "Kazuo does not teach any type of detector that examines the printing data received from the host computer, or the dot data stored in the image buffer, to detect transitions or find blank area" Upon further review, the examiner finds that Kazuo teaches "When the width 1 of paper 300 is equal to or larger than a scheduled printing width 8, data is transmitted to a driving control part according to the content of an image buffer 301." Lastly, Applicant argues that Ogura is not germane to the claims at issue. Ogura is relevant because in comparison with Applicant's invention both deal with a facsimile that detects/adjusts margins/image data..


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